

**Amendments to Claims:** Cancel all claims of record and substitute new claims as follows:

**Claims 1-2 (canceled)**

**Claim 3 (new)**

3 A process, as applied in the field of thermal or chemical fluid process control, for rapidly controlling a process (measured) parameter to a setpoint without overshoot using a continuous time domain polynomial feedback controller comprising of:

- a. A means for accepting an error signal from an error signal calculator and calculating a continuous type controller output using a user tuned time domain polynomial equation, which includes an nth-order exponent, in a feedback configuration.
- b. A means for automatically converting to an integral correction for said setpoint for said setpoint maintenance based on user defined criteria; and
- c. A user selectable means for improving a bias tuning parameter automatically based on user defined criteria.

Whereby, said controller moves said process parameter to said setpoint more rapidly in applications where overshoot is not allowed requiring fewer resources (energy, materials, time, etc.) to achieve said setpoint.

**Claim 4 (new)**

4 A process, as applied in the area of ingredient addition or package filling, using a controller of claim 3. Whereby, said controller improves (reduces) process/product variability when used for ingredient addition into a production batch or process stream or for product filling applications requiring less materials necessary to achieve said setpoint.